

REMARKS

New claim 35 has been added to further scope the claimed invention, and finds support in the paragraph beginning at line 23 on page 24 of the specification.

The art rejections are in error.

Considering first the rejection of claims 1-11, 13, 14, 16-21, and 26-33 under 35 U.S.C. § 102(b) as anticipated by Küchel (U.S. Patent No. 4,872,755), each of independent claims 1, 29, and 33, in part, two light sources that are separated spatially but are not separated temporally, i.e. a source module configured to generate mutually orthogonally polarized beams of light from spatially separated sources. These spatially separated sources produce beams that substantially overlap over the entire optical path of the interferometer. In addition, the corresponding return beams (reflected from test and reference objects) follow a common path inside the instrument as underscored in Claim 2. Küchel does not teach this. Rather, Küchel teaches the use of light sources that must be separated temporally. Thus, to the contrary, a major spatial separation of sources in the Küchel's interferometer is required only as a part of the delay line and does not constitute part of the Fizeau system. As a result, Küchel forgoes the important common path nature of a classic Fizeau system, which is not compromised in the applicants design. For example, the embodiment relied upon by the Examiner and depicted in Figure 6 of Küchel includes a delay device to create a delay between the light source components (col. 10, lines 27-28). Küchel further underscores the importance of the delay device to the invention (col. 4, lines 8-13). Thus, Küchel cannot achieve or render obvious any of independent claims 1, 29, or 33, or any of claims 2-11, 13, 14, 16-21, 26-28, and 30-32 that depend directly or indirectly on claim 1 or claim 29 as the case may be.

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Turning to the rejection of claims 12, 15, 22-25, and 34 under 35 U.S.C. § 103(a) as being unpatentable over Küchel, claims 12, 15, and 22-25 depend directly or indirectly on claim 1. The deficiencies of Küchel vis-à-vis claim 1 are discussed above. Dependent claims 12, 15, and 22-25 are allowable over Küchel for the same reasons above adduced relative to claim 1, as well as for their own additional limitations.

Turning specifically to the rejection of claim 34, claim 34 requires in part, a quarter waveplate positioned between the reference object and the test object. Even assuming arguendo that the Examiner is generally correct that the relocation of a working part only requires routine skill in the art, the quarter waveplate required by claim 34 functions differently from the quarter waveplate in the source module of Küchel. Moreover, Küchel specifically teaches away from the use of a quarter waveplate in a Fizeau interferometer between the test and reference sources (col. 10, lines 8-15). Thus, Küchel cannot render obvious any of claims 12, 15, 22-25 and 34.

New claim 35 is dependent on claim 1 and is allowable over the applied art for the same reasons above adduced relative to claim 1, as well as for its own additional limitations.

Form PTO-2038 in the amount of \$25.00 is enclosed for the added claim fee.

Having dealt with all the objections raised by the Examiner, the Application is believed to be in order for allowance. Early and favorable action is respectfully requested.

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